



FARM TOOLS AND EQUIPMENT FOR AGRICULTURE



SURENDRA SINGH

Farm Tools and Equipment for Agriculture

Prof. Surendra Singh, Ph.D.

Ex. Project Coordinator
AICRP on Farm Implements & Machinery (ICAR)



NEW INDIA PUBLISHING AGENCY

New Delhi – 110 034



NEW INDIA PUBLISHING AGENCY

101, Vikas Surya Plaza, CU Block, LSC Market
Pitam Pura, New Delhi 110 034, India

Phone: + 91 (11)27 34 17 17 Fax: + 91(11) 27 34 16 16
Email: info@nipabooks.com
Web: www.nipabooks.com

Feedback at feedbacks@nipabooks.com

© Author/Publisher 2016

ISBN : 978-93-85516-22-1

All rights reserved. No part of this work may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior written permission of the copyright and the publisher.

This book contains information obtained from authentic and highly regarded sources. Reasonable efforts have been made to publish reliable data and information, but the author/s, editor/s and publisher cannot assume responsibility for the validity of all materials or the consequences of their use. The author/s, editor/s and publisher have attempted to trace and acknowledge the copyright holders of all material reproduced in this publication and apologize to copyright holders if permission and acknowledgements to publish in this form have not been taken. If any copyright material has not been acknowledged please write and let us know so we may rectify it, in subsequent reprints.

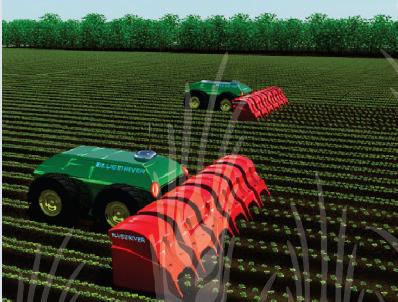
Trademark notice: Presentations, logos (the way they are written/presented) in this book are under the trademarks of the publisher and hence, if copied/resembled the copier will be prosecuted under the law.

Composed, Designed and Printed in India.

Contents

| | |
|--|------------|
| <i>Preface</i> | v |
| 1. Introduction | 1 |
| 2. Land levelling equipment | 15 |
| 3. Tillage equipment | 41 |
| 4. Seeding, planting and transplanting equipment | 119 |
| 4.1 Seeding equipment | 119 |
| 4.2 Planting equipment | 166 |
| 4.3 Vegetable planting and transplanting equipment | 213 |
| 4.4 Rice seeding and transplanting machinery | 244 |
| 5. Weeding and fertilizer application equipment..... | 275 |
| 5.1 Weeding and interculture equipment..... | 275 |
| 5.2 Fertilizer application equipment | 305 |
| 6. Plant protection equipment | 325 |
| 7. Harvesting and threshing equipment | 383 |
| 7.1 Harvesting & threshing equipment for cereal crops | 383 |
| 7.2 Harvesting & threshing equipment for oilseeds and pulses . | 447 |
| 7.3 Harvesting & threshing equipment for maize | 469 |
| 7.4 Harvesting/digging equipment for root crops | 483 |
| 7.5 Harvesting equipment for sugarcane | 505 |
| 7.6 Harvesting/picking equipment for cotton | 520 |

| | |
|--|------------|
| 8. Forage harvesting equipment | 539 |
| 9. Farm tools and equipment for horticulture, plantation and hill agriculture | 571 |
| 9.1 Farm tools and equipment for horticulture and plantation crop | 571 |
| 9.2 Farm tools and equipment for hill agriculture | 633 |
| 10. Farm tools and equipment for dryland agriculture | 651 |
| 11. Straw management equipment | 663 |
| List of Manufacturers | 693 |



FARM TOOLS AND EQUIPMENT FOR AGRICULTURE

The book on 'Farm Tools and Equipment for Agriculture' is an attempt to put together all relevant information regarding the availability of various tools and equipment for land development, seed bed preparation, seeding, planting & transplanting, weeding & interculture, plant protection, harvesting and threshing, straw management, horticulture and forage crops. Information on each item contains a brief description, its uses and power source required. In this a list of manufacturers who have supported the book writing through photographs and drawings are appended in the last to facilitate the readers for easy location. The information provided is quite exhaustive.

- o **Introduction**
- o **Land leveling equipment**
- o **Tillage equipment**
- o **Seeding, planting and transplanting equipment**
- o **Weeding and fertilizer application equipment**
- o **Plant protection equipment**
- o **Harvesting and threshing equipment**
- o **Forage harvesting equipment**
- o **Farm tools and equipment for horticulture, plantation and hill agriculture**
- o **Farm tools and equipment for dryland agriculture**
- o **Straw management equipment**

Prof. Surendra Singh, Ph.D., Ex. Project Coordinator,
AICRP on Farm Implements & Machinery (ICAR), India



NEW INDIA PUBLISHING AGENCY

101, Vikas Surya Plaza, CU Block, L.S.C.Market
Pitam Pura, New Delhi-110 034, India
Tel. : +91(11) 27341717, Fax : +91(11) 27341616
E-mail : info@nipabooks.com
Web : www.nipabooks.com

ISBN 9789385516221

